

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,613	02/04/2004	Roger Keith Stager	ALA-PT011	3439
63983 7590 01/11/2007 VOLPE AND KOENIG, P.C. NET APP 30 S. 17TH STREET			EXAMINER	
			LE, DIEU MINH T	
UNITED PLAZ PHILADELPH	ZA, SUITE 1600 IIA. PA 19103		ART UNIT	PAPER NUMBER
	,	•	2114	
	· .			· -
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	01/11/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)				
Office Action Summary		10/771,613	STAGER ET AL.				
		Examiner	Art Unit				
		Dieu-Minh Le	2114				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SH WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1.: SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be ting will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status		And .					
2a)⊠	1) Responsive to communication(s) filed on 10/16, 12/14, 1/04,& interview 1/5/07. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
5) ☐ 6) ☒ 7) ☐ 8) ☐ Applicati 9) ☐ 10) ☒	Claim(s) 1-16 is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) 1-16 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examine The drawing(s) filed on 04 February 2004 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine The oath of the oath of the oath	wn from consideration. or election requirement. er. e: a)⊠ accepted or b)□ objecte drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
12) <u></u> a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureasee the attached detailed Office action for a list	ts have been received. ts have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
2) 🔲 Notice 3) 🔯 Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date 12/14/06, 1/4/07.	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate				

DETAILED ACTION

- 1. This Office Action is in response to the amendment filed 10/16/2006 and the interview on 12/08/06, 12/21/06 and 01/05/2006 in application 10/771,613.
- 2. Claims 1-16 are again presented for examination.
- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 1-16 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Zalewski et al. (U.S. 7,032,126 hereafter referred to as Zalewski_126) in view of Zalewski et al. (U.S. Publication No. 2005/0010529 hereafter referred to as Zalewski_529).

This rejection is being applied for the same reasons set forth in the previous Office Action mailed 07/14/2006. As per claims 1-16 see the previous office action for the detailed teaching of Zalewskis as well as the reasons and motivation for combined.

Applicant asserts that Zalewski_126 and Zalewski_529 failed to teach or suggest the following:

- a. the primary volume can be rewound to any point in time, regardless of whether the primary volume is in a stable or not at the previous point in time;
- b. the concept of rewinding to "any point in time" (PIT).

Examiner respectfully transverses Applicant's argument as follows:

a. First, Examiner would like to bring Applicant attention to Zalewski_126's method and apparatus for creating a dynamic storage for data recovery and <u>continuous</u> data protection [abstract, fig.1-3, col. 1, lines 40-50; col. 2, lines 20-27]. Zalewski_126 clearly demonstrated <u>the failover operations, snapshot, and a point-in-time</u>

(APIT/PIT) capability used to support failover, data recovery/protection process including identifying data (i.e., previous state data), preventing data loss, etc... in a plurality of data storage volumes [fig. 1-3, col. 4, lines 30-50]. In addition, Zalewski 529 explicitly

Art Unit: 2114

illustrated the failover operations, snapshot, and <u>a point-in-time (APIT/PIT)</u> used to support failover, data recovery/protection process including data mirroring and policy in a plurality of data storage volumes including primary and secondary set of data [abstract, fig. 1-4, par. 0005, 0011,0017-0019]. It is clear that both Zalewski_126 and Zalewski 529 do teach applicant's invention.

Second, in response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the feature upon which Applicant relies (i.e., the primary volume can be rewound to any point in time, regardless of whether the primary volume is in a stable or not at the previous point in time) is not recited in the rejected claim. Although the claims is interpreted in light of the specification, limitations from the specification is not read into the claims. In re

Third, Zalewski_126 clearly demonstrated the failover
operations, snapshot, and-a-point-in-time (APIT/PIT)

capability used to support failover, data

recovery/protection process including identifying data,

Art Unit: 2114

preventing data loss, etc... in a plurality of data storage volumes [fig. 1-3, col. 4, lines 30-50]. Zalewski_126 further illustrated the capability of <u>data mapping</u>, reading, writing, mirroring, etc... (i.e., data structures) including data policy in supporting data detection, correction, and protection process [col. 3, lines 55 through col. 4, lines 50].

Therefore, it is obvious to an ordinary skill in the art that the combination of the Zalewski_126 and Zalewski_529's inventions do clearly teach applicant's limitation.

b. First, it is <u>not</u> true that both Zalewski_126 and Zalewski_529 failed to teach "the concept of rewinding to "any point in time" (PIT)". This is because Zalewski_126 demonstrated capability for creating a dynamic storage for data recovery and <u>continuous</u> data protection [abstract, fig.1-3, col. 1, lines 40-50; col. 2, lines 20-27]. Furthermore, Zalewski_529 explicitly illustrated the failover operations, snapshot, and <u>a point-in-time</u>

(APIT/PIT) used to support failover, data

recovery/protection process including data mirroring and policy in a plurality of data storage volumes including primary and secondary set of data [abstract, fig. 1-4, par.

Art Unit: 2114

0005, 0011,0017-0019]. By performing <u>data protection</u>

<u>continuously</u> process, data can be rewound at any point in time in supporting the continuously data protection within data storage system.

Second, Zalewski_126 applied the failover operations, snapshot, and a point-in-time (APIT/PIT) capability to perform failover, data recovery/protection process including identifying data (i.e., previous state data), preventing data loss, etc... in a plurality of data storage volumes [fig. 1-3, col. 4, lines 30-50]. By utilizing the snapshot technology therein, data within memory volume can be rewound to any point in time (PIT) in order to perform data/error detection, protection, and correction process [col. 4, lines 20-50].

Third, as indicate in previous office action that the combination of Zalewski_126's <u>failover operations</u>,

<u>snapshot</u>, and a point-in-time (APIT/PIT) used to support

<u>failover</u>, data recovery/protection process including

<u>identifying data (i.e., previous state data)</u>, preventing

<u>data loss</u>, etc... in a plurality of data storage volumes and

Zalewski 529's applying the failover operations, snapshot,

Art Unit: 2114

and a point-in-time (APIT/PIT) used to support failover, data recovery/protection process including data mirroring and policy in a plurality of data storage volumes including primary and secondary set of data do teach applicant's invention. By utilizing this approach, the multi-data storage volumes data system including backup capability (i.e., OS failover) can enhance its operation performance, more specifically to ensuring the error detected, corrected, and replaced (i.e., backup) in proper and efficient manner.

Applicant's arguments filed 10/16/2006 have been fully considered but they are not persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Art Unit: 2114

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday Thursday from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644.

The Tech Center 2100 phone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DIEU-MINH THAI LE PRIMARY EXAMINER ART UNIT 2114

DML 01/07/06